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### **ABSTRACT**

A frequency range bounder for limiting the frequency of a voltage controlled oscillator uses a multiplexer that responds to comparator inputs indicating whether an input control signal will allow the oscillator frequency to go beyond a predetermined range. If the control signal keeps the frequency within the range, the control signal is sent directly to an oscillator driver. If the control signal is above or below the range, the multiplexer outputs an alternative value as the control signal. As a result, the oscillator frequency is prevented from extending beyond an allowable tolerance range.

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